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September 1989



# Farm Animal Welfare, January 1979-April 1989





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# Farm Animal Welfare, January 1979-April 1989

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## INTRODUCTION

The citations in this bibliography are selected from works by U.S. and foreign authors on all aspects of farm animal welfare as it relates to behavior and a wide variety of environmental variables. All citations are derived from the database AGRICOLA (AGRICultural OnLine Access), a database compiled by the National Agricultural Library (NAL) and its cooperators, and are a part of the NAL collection.

Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is provided in the publication.

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**0404**

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**0406**

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**0414**

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0442

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0456

**Variation in hormonal feedback and reproductive performance in rams of different genotypes from birth through puberty.**

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**Variations in the strength of maternal behaviour and its conflict with flocking behaviour in Dalesbred, Jacob and Soay ewes.**

Shillito, E. Hague, W.P.; Yeomans, M. Amsterdam : Elsevier North-Holland. Developments in animal and veterinary sciences. 1985. v. 18. p. 153-158. Includes 8 references. (NAL Call No.: DNAL QL1.D48).

0458

**Variations in the strength of maternal behaviour and its conflict with flocking behaviour in Dalesbred, Jacob and Soay ewes (Sheep breeds).**

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0461

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0467

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0468

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# ANIMAL REPRODUCTION

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**Mating behaviour of rams in pens.**

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has some 'need' to perform nest-building behaviour but does not have to build a nest herself; a pre-moulded nest is perfectly acceptable as long as it allows the performance of the behaviour. When pre-moulded nests were compared with traditional litter nests, the majority of hens opted for litter nests suggesting that these nests have features (as yet undefined) that are particularly attractive to nesting hens. Animal behaviour. Feb 1989. v. 37 (2). p. 215-231. ill. Includes references. (NAL Call No.: DNAL 410 B77).

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**Mutual recognition between sows and their litters.**  
Horrell, I. Hodgson, J. Darmstadt : Kuratorium fur Technik und Bauwesen in der Landwirtschaft, 1984? . Proceedings of the International Congress on Applied Ethology in Farm Animals, Kiel, 1984 / edited by J. Unshelm, G. van Putten and K. Zeeb ; sponsored by the Federal Ministry of Food, Agriculture and Forestry. p. 108-112. Includes references. (NAL Call No.: DNAL SF756.7.I5 1984).

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**Neurochemistry of abnormal behaviour in farm animals.**

Sharman, D.F.CTVSD. The Hague : Martinus Nijhoff. Current topics in veterinary medicine and animal science. 1983. Paper presented at the Seminar on Indicators Relevant to Farm Animal Welfare, Mariensee, 9-10 November 1982. v. 23. p. 61-65. Includes references. (NAL Call No.: SF600.C82).

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**Nest site selection and nest-building behaviour in domestic fowl.**  
ANBEA. Duncan, I.J.H. Kite, V.G. London : Bailliere Tindall. Domestic hens, Gallus gallus domesticus, prefer to lay in nests containing loose material which can be both moulded by their body and feet movements and manipulated with their beaks during nest building. This study attempted to define which of these two functions the hen regards as more important. When given a choice, hens opted for nests that could be moulded by body and feet movements but could not be manipulated with the beak rather than nests that could not be moulded but could be manipulated. When the importance of loose material was assessed independently of whether the nest could be moulded or not, hens did not seem to regard its presence as essential. These findings suggest that it is more important for hens to have a nesting site with a substrate that can be moulded with the body and feet than one that can be manipulated with the beak. The study then attempted to elucidate whether it is the performance of nest-building motor patterns or the attainment of the final moulded nest that hens find rewarding. When given a choice between pre-moulded nests and mouldable nests, hens opted for the premoulded ones. The frequencies of nest-building activities performed in both nest types, however, were no different. These findings suggest that the hen

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**Night-time behavior of stabled and pastured peri-parturient ponies.**

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**Noise output of hens subjected to interrupted lighting regimens.**

BPOSA. Lewis, P.D. Perry, G.C.; Tuddenham, A. Oxfordshire : Carfax Publishing Company. British poultry science. Sept 1987. v. 28 (3). p. 535-540. Includes references. (NAL Call No.: DNAL 47.8 B77).

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**Normal and abnormal sexual behavior of the equine male.**

Pickett, B.W. Squires, E.L.; Voss, J.L. Fort Collins, Colo. : The Station. General series - Colorado State University Experiment Station. Aug 1981. (1004). 33 p. ill. Includes references. (NAL Call No.: DNAL 100 C71G).

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**Normal and more highly reactive horses. I. Heart rate, respiration rate and behavioral observations.**

McCann, J.S. Heird, J.C.; Bell, R.W.; Lutherer, L.O. Amsterdam : Elsevier Science Publishers B.V. Applied animal behaviour science. May 1988. v. 19 (3/4). p. 201-214. Includes references. (NAL Call No.: DNAL QL750.A6).

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**A note concerning the use of the maternal bond concept.**

Kent, J.P. Amsterdam : Elsevier Science Publishers B.V. Applied animal behaviour science. June 1987. v. 17 (3/4). p. 361-363. Includes references. (NAL Call No.: DNAL QL750.A6).

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**A note on multiple fostering of calves on to nurse cows at a few days post-partum (Behavior, maternal bonding).**

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**A note on nursing termination and resting behaviour of suckling piglets (Ethology).**

Petherick, J.C. Amsterdam : Elsevier. Applied animal ethology. Jan 1983. v. 9 (3/4). p. 359-365. ill. Includes references. (NAL Call No.: QL750.A6).

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**A note on social facilitation and competition in the feeding behaviour of pigs.**

Hsia, L.C. ANIPA. Wood-Gush, D.G.M. Harlow : Longman. Animal production. Aug 1983. v. 37 (pt. 1). p. 149-152. Includes references. (NAL Call No.: 49 AN55).

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**A note on the behaviour of individually-penned sheep regarding their use for research purposes.**

ANIPA. Marsden, D. Wood-Gush, D.G.M. Neston, South Wirral, England : British Society of Animal Production. Animal production. Feb 1986. v. 42 (pt.1). p. 157-159. Includes references. (NAL Call No.: DNAL 49 AN55).

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**A note on the effect of castration on the ease of movement and handling of young cattle in yards.**

ANIPA. Hinch, G.N. Lynch, J.J. Neston, South Wirral, England : British Society of Animal Production. Animal production. Oct 1987. v. 45 (pt.2). p. 317-320. Includes references. (NAL Call No.: DNAL 49 AN55).

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**A note on the effect of mixed or segregated penning of boars and gilts over the live-weight range 20 to 80 kg (kilograms) on performance, carcass characteristics and behaviour.**

Smith, W.C. Pearson, G.; Holmes, R.J. Harlow : Longman. Animal production. June 1984. v. 38 (pt.3). p. 503-506. Includes references. (NAL Call No.: 49 AN55).

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**A note on the effect of recording frequency on the estimation of grazing time of cattle and sheep (Behavior).**

Smith, H.K. Hodgson, J. Amsterdam : Elsevier. Applied animal ethology. Jan 1984. v. 11 (3). p. 229-236. Includes references. (NAL Call No.: QL750.A6).

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**A note on the effects of various diets on the drinking behaviour of wether sheep.**

Bass, J.M. ANIPA. Harlow : Longman. Animal production. Oct 1982. v. 35 (pt.2). p. 293-294. 5 ref. (NAL Call No.: 49 AN55).

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**A note on the feeding behaviour of Australorp and White Leghorn chicks hatched in December and April.**

Gupta, S.C. Pandey, J.N. New Delhi, Indian Council of Agricultural Research. Indian journal of animal sciences. Nov 1978. v. 48 (11). p. 839-841. ill. 15 ref. (NAL Call No.: 41.8 IN22).

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**Note on the grazing behaviour of sheep and goat on natural degraded semi-arid range land (Rajasthan).**

Swain, N. New Delhi, India, Indian Council of Agricultural Research. The Indian journal of animal sciences. Sept 1982. v. 52 (9). p. 827-830. (NAL Call No.: 41.8 IN22).

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**A note on the grazing behaviour of young bulls and steers.**

Hinch, G.N. ANIPA. Thwaites, C.J.; Lynch, J.J. Harlow : Longman. Animal production. Oct 1982. v. 35 (pt.2). p. 289-291. 7 ref. (NAL Call No.: 49 AN55).

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**A note on the role of behaviour in pig production and the effect of amperozide on growth performance.**

ANIPA. Bjork, A.K.K. Olsson, N.G.E.; Martinsson, K.B.; Goransson, L.A.T. S.I. : Durrant. Animal production. Dec 1987. v. 45 (pt.3). p. 523-526. Includes references. (NAL Call No.: DNAL 49 AN55).

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**A note on the space use for excretory behaviour of suckling piglets (Ethology).**

Petherick, J.C. Amsterdam : Elsevier. Applied animal ethology. Jan 1983. v. 9 (3/4). p. 367-371. ill. Includes references. (NAL Call No.: QL750.A6).

1197

**The notion of ethological 'need', models of motivation and animal welfare.**

ANBEA. Hughes, B.O. Duncan, I.J.H. London : Bailliere Tindall. The increasingly widespread use of the term ethological 'need', implying that the welfare of animals in intensive husbandry systems will suffer if they are unable to express a normal range of behaviour patterns, has been criticized on the grounds that the term has not been clearly defined nor does it rest on a solid scientific foundation. In this critical review, evidence is presented

which is consistent with the idea that there are cases in which the performance of behaviour itself does not motivationally significant consequences which are not necessarily related to functional requirements. For example, hens go through nest-building sequences during pre-laying behaviour, even though the nest they created previously is still available. This kind of finding is difficult to explain without involving the concept of ethological 'need'. Existing models of motivation are shown to be inadequate in explaining much of the behaviour seen in barren or impoverished environments, or when the animals are highly motivated in situations where consummatory behaviour is difficult to carry out. A modified model which can account for the occurrence of these stereotyped, abnormal and repetitive behaviour patterns is presented. The problems raised by equating the term 'need' with 'necessity' are discussed, particularly in the context of intensive environments where animals are faced with the task of occupying long periods of time with a limited range of behaviour patterns; the authors agree with Dawkins that one solution is its replacement by the concept of 'elasticity', but argue that the notion of 'necessity' may need to be broadened. Animal behaviour. Nov/Dec 1988. v. 36 (6). p. 1696-1707. Includes references. (NAL Call No.: DNAL 410 B77).

1198

**Nursing and suckling behaviour of sows and their litters before and after grouping in multi-accommodation pens.**

Bryant, M.J. Rowlinson, P. Harlow : Longman. Animal production. Apr 1984. v. 38 (pt.2). p. 277-282. Includes references. (NAL Call No.: 49 AN55).

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**Nursing apparatus for neonatal piglets (Behavior, artificial nursing, early weaning).**  
Lewis, N.J. CNJNA. Hurnik, J.F.; Gordon, D.J. Ottawa : Agricultural Institute of Canada. Canadian journal of animal science. Sept 1982. v. 62 (3). p. 975-978. ill. 6 ref. (NAL Call No.: 41.8 C163).

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**Nursing behaviour and maternal aggression among Welsh ponies (*Equus caballus*).**

Crowell-Davis, S.L. Amsterdam : Elsevier Science Publishers B.V. Applied animal behaviour science. May 1985. v. 14 (1). p. 11-25. ill. Includes 16 references. (NAL Call No.: DNAL QL750.A6).

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**Effects of confinement on attainment of puberty in gilts (Housing, temperature).**  
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**Effects of confinement upon behavioural, hormonal responses and production indices in fattening pigs.**

CTVSD. Warnier, A. Zayan, R. The Hague : Martinus Nijhoff. Current topics in veterinary medicine and animal science. Paper presented at the "Seminar on the Social Space for Domestic Animals," January 10-11, 1985, Brussels. 1985. v. 35. p. 128-150. ill. Includes references. (NAL Call No.: DNAL SF600.C82).

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**Effects of double decking and space allowances on the performance and behavior of feeder lambs.**

JANSAG. Gonyou, H.W. Stookey, J.M.; McNeal, L.G. Champaign, Ill. : American Society of Animal Science. Journal of animal science. May 1985. v. 60 (5). p. 1110-1116. ill. Includes 11 references. (NAL Call No.: DNAL 49 J82).

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JANSAG. Vargas, J.V. Craig, J.V.; Hines, R.H. Champaign, Ill. : American Society of Animal Science. Journal of animal science. Aug 1987. v. 65 (2). p. 463-474. Includes references. (NAL Call No.: DNAL 49 J82).

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**Effects of force-molting by conventional and experimental light restriction methods on performance and agonistic behavior of hens.**

Hembree, D.J. Adams, A.W.; Craig, J.V. Champaign, Ill.: Poultry Science Association. Poultry science. Feb 1980. v. 59 (2). p. 215-223. ill. 31 ref. (NAL Call No.: 47.8 AM33P).

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Gonyou, H.W. Hemsworth, P.H.; Barnett, J.L. Amsterdam : Elsevier Science Publishers B.V. Applied animal behaviour science. Nov 1986. v. 16 (3). p. 269-278. Includes references. (NAL Call No.: DNAL QL750.A6).

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Baldwin, B.A. Parrott, R.F. Darmstadt : Kuratorium fur Technik und Bauwesen in der Landwirtschaft, 1984? . Proceedings of the International Congress on Applied Ethology in Farm Animals, Kiel, 1984 / edited by J. Unshelm, G. van Putten and K. Zeeb ; sponsored by the Federal Ministry of Food, Agriculture and Forestry. p. 382-385. Includes references. (NAL Call No.: DNAL SF756.7.I5 1984).

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**Effects of photoperiod and filtered light on growth, reproduction, and mating behavior of turkeys. 1. Growth performance of two lines of males and females.**

POSCAL. Levenick, C.K. Leighton, A.T. Jr. Champaign, Ill. : Poultry Science Association. Poultry science. Nov 1988. v. 67 (11). p. 1505-1513. Includes references. (NAL Call No.: DNAL 47.8 AM33P).

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Barnett, J.L. Hemsworth, P.H.; Winfield, C.G.; Hansen, C. Amsterdam : Elsevier Science Publishers B.V. Applied animal behaviour science. Nov 1986. v. 16 (3). p. 249-257. Includes references. (NAL Call No.: DNAL QL750.A6).

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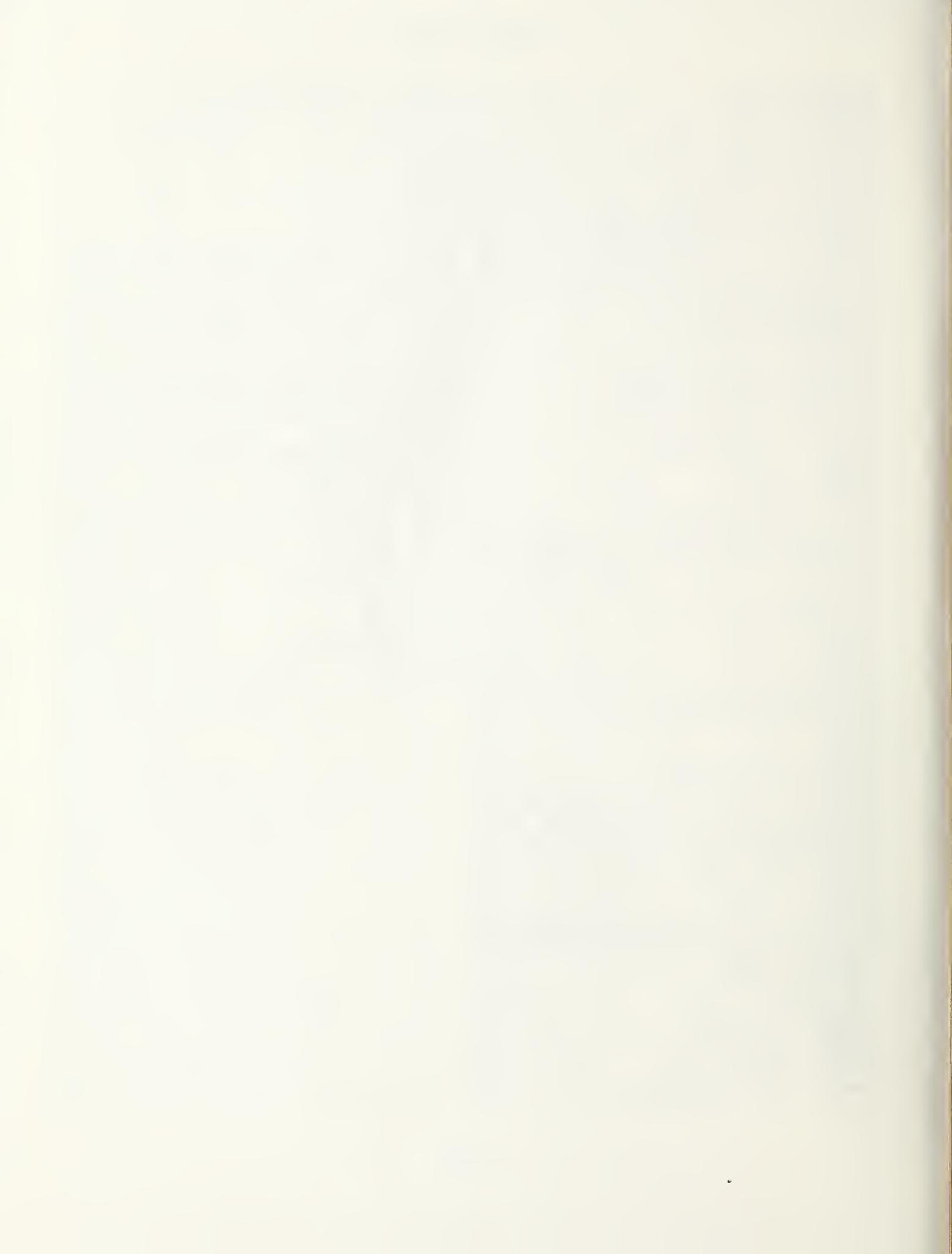
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